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Wagner

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[54] **METHOD OF PREDICTING STEADY INCOMPRESSIBLE FLUID FLOW**

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[52] **U.S. Cl.** **73/1.57**

[58] **Field of Search** 364/509, 510; 73/1.57, 147, 861.42

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[57] **ABSTRACT**

A method of predicting steady, incompressible fluid flow over a given geometry is provided. The given geometry is modeled with a plurality of overlapping blocks. Pseudocompressibility equations are solved in an iterative process according to a finite differencing method. The solutions at each overlapped portion are used to update solutions of adjoining blocks. By linking the blocks through overlapping, the solution converges at a faster rate than if each block were solved for independently.

3 Claims, 2 Drawing Sheets